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At the
forefront

of the world's

high-tech GPS

navigation

industry.

1998

ANNUAL

REPORT



PELORUS NAVIGATION SYSTEMS INC.

ASE: PN

#### orporate Overview

W ZAME

Pelorus Navigation Systems Inc.
designs, manufactures, installs
and maintains navigational
equipment for the aviation
industry. In its sixteen year
history, the Company has earned
its reputation for
innovation, quality and product
reliability with equipment
installations on six continents.

The tradition of innovation continues today with the Company's lead product, the GPS-based Honeywell/Pelorus SLS-2000, the world's first FAA Type Approved satellite landing system for aircraft. Pelorus also manufactures. markets and installs Distance Measuring Equipment for airports, helicopter landing pads and marine platforms. Manufacturing facilities are located in Calgary, Alberta and Saskatoon. Saskatchewan; the corporate office is located in Calgary. Shares of Pelorus are listed for trading on The Alberta

The company's fiscal year-end is May 31.

Stock Exchange (symbol: PN).

#### Notice of Annual Meeting

The Annual General Meeting of the shareholders of Pelorus Navigation Systems Inc. will be held at 3:00 pm, Thursday, October 29, 1998, at The Westin Hotel, 320 - 4th Avenue S.W., Calgary, Alberta, Canada. Shareholders and others interested in the affairs of the company are welcome to attend.

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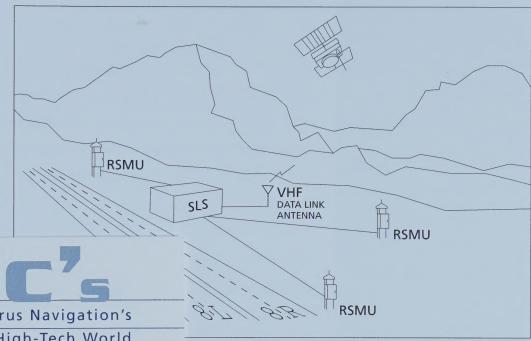
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# A High-Tech Tool for the World's **Navigation Industry**



Measurement Unit (RSMU) receives and processes raw GPS satellite data. The GPS information is sent by land

Remote

Satellite

of Pelorus Navigation's

#### High-Tech World

**AW05** 

DGPS DIME EUROCAE

FAA **GLONASS** 

GP5

ICAO ILS LAA5 MASP5

MLS MOP5 RSMU RTCA

**SARPS** SCAT

5L5 STC TA TC

Automated Weather Observation (and Reporting) System Differential Global Positioning System Distance Measuring Equipment European Organization for Civil Aviation Equipment

Federal Aviation Administration (U.S.) Global Navigation Satellite System (Russia; based on a constellation of 24 Russian satellites)

Global Positioning System (U.S. based on an American constellation of 24 satellites) International Civil Aviation Organization Instrument Landing System Local Area Augmentation System Minimum Aviation System Performance

Microwave Landing System Minimum Operational Performance Standards Remote Satellite Measurement Unit

(Formerly) Radio Technical Commission for Aeronautics Standards and Recommended Practices Special Category (FAA certification); categories of FAA certification for SLS equipment are based on specific parameters. Satellite Landing System Supplemental Type Certificate (FAA)

Type Acceptance Transport Canada

nce 1993, the U.S. Department of Defense's Global Positioning stem (GPS) constellation of 24 satellites has provided 3-D positioning formation 24 hours a day, anywhere on earth. The satellites broadst ranging codes to GPS receivers; the receivers measure the transit ne of the signals and then determine the distance between a tellite and the user within a tolerance of approximately 100 metres.

ith the GPS receivers in known locations, the error between the parent range and the true range may be computed as a lifferential" correction. The differential corrections may be applied other receivers in the local area to improve the accuracy and egrity of their position. This is the basis of a differential GPS or cal Area Augmentation System.

e use of GPS for navigation and survey purposes has grown rapidly. a very short time, marine GPS systems have become virtually andard equipment on pleasure craft as well as commercial vessels. iation is the next industry to benefit from GPS - with the velopment of a Satellite Landing System (SLS) which enables craft to make a precision approach to multiple runway ends and id in any weather.

 📭 5 is the single most important advance in air navigation since we started flying airplanes

#### PELORUS: A Leadership Position In an Emerging World Market

"Satellite-based approaches at airports will lessen flight cancellations, diversions, and overflights due to bad weather, and civil aviation authorities will see reduced costs as conventional aids are eliminated, benefiting both operators and taxpayers."

Ross Bowie, Program Manager Satellite Program Office Transport Canada (June 1995) Involved in the high-tech global marketplace for more than a decade, Pelorus Navigation Systems Inc. is now poised to achieve new heights with the potential of its lead product which has been developed in partnership with Honeywell Inc., the world's leading supplier of avionics for aircraft.

The Honeywell/Pelorus Satellite Landing System is the aviation industry's first total solution for precision approaches using differential Global Positioning System (DGPS) technology. It integrates both air and ground station DGPS requirements for precision approaches and landings.

#### Proven Technology

- The most advanced precision approach system in the world.
- Provides pilots with very precise navigation data to fly instrument approaches.
- More versatility and capability than existing instrument landing systems (ILS).
- Costs far less than traditional landing systems.
- Enhances aviation safety, improves traffic flow, increases runway availability, reduces weather delays.
- Serves all runway ends within a 30-mile radius at a fraction of the cost of a single ILS.

#### A Strong Manufacturing/Marketing Team

In January 1995, Honeywell and Pelorus joined forces to develop and manufacture a satellite landing system for precision approaches. The relationship combines Honeywell's worldwide product support capability, expertise in GPS and strong market presence as an avionics supplier with Pelorus' track record as a leading developer and installer of ground-based navigational systems. Honeywell is taking the lead for marketing the SLS and Pelorus is responsible for manufacturing, installation and customer training. Honeywell and Pelorus are jointly responsible for product development.

# PELORUS: Positioned for Exponential Growth & Outstanding Success

#### **Global Opportunity**

The FAA estimates there are 48,000 airports in the world with runways over 3500 feet (1066 metres), capable of landing jet aircraft and, therefore, potential candidates for a precision approach and landing system. However, less than 5% have precision approach and landing systems.

"Airline safety would be enhanced significantly with precision approach on every runway served by commercial carriers."

Captain Joe DePete Airline Pilots Association International (June 1995)

Pilots prefer the steady descent at constant airspeed that is facilitated with a precision approach and landing system. Until now, airports have not been equipped with such systems because conventional technology is expensive, difficult to install and maintain, and not feasible for use at airports located in hilly or mountainous terrain.

The Honeywell/Pelorus SLS is cost-effective, easy to install, simple to maintain, and feasible for all terrain conditions.

#### **Why** Pelorus will achieve its business goals:

- The Honeywell/Pelorus team is far ahead of the competition in the development of SLS (still the only system with FAA certification).
- Honeywell is a powerful strategic ally, committed to the success of the Honeywell/Pelorus SLS with an aggressive worldwide marketing program.
- A strong balance sheet and ample plant capacity to meet future growth demands promised by SLS market potential.
- A management team with the vision, leadership, expertise and commitment to capitalize on the opportunities of the future.

#### Honeywell Inc.

Honeywell is a global leader in control technology and involved in three main business areas: home and building control systems, industrial control systems, and space and aviation control systems. The company is the worldwide market leader in each area of business. It is the world's leading supplier of avionics systems for commercial, military and space markets. Honeywell technology has been on board every manned U.S. space flight since Mercury and is on nearly every commercial aircraft flying today.

#### President's Report



Fellow Shareholders:

For Pelorus Navigation Systems Inc., 1998 was a year of challenges, changes and significant accomplishments – a year of continuing investment in the future of the company.

As I look forward to the years ahead, I do so with a feeling of confidence. We have built a

strong foundation from which to go forward. While 1999 promises to be a year of further strengthening this foundation, the years beyond will be the years when we and the world begin to enjoy the benefits of investments we have made in satellite navigation and precision approach guidance.

#### A Milestone Achievement

Fiscal 1998 got off to a wonderful start in early August 1997 when the Honeywell/Pelorus SLS-2000 Satellite Landing System became the world's first Differential Global Positioning System (DGPS) to achieve Type Approval from the United States Federal Aviation Administration. This event capped over five years of effort by a dedicated group of Pelorus and Honeywell personnel.

At the time, we estimated that we had about a six to twelve month lead on our competitors. Today, the SLS-2000 is still the only available system to have achieved Type Approval.

#### New SLS Installations in 1998

During the year, four SLS-2000 systems were commissioned for operation with the Honeywell

Citation V corporate jet. In January 1998, systems were commissioned at Minneapolis-St. Paul and Newark International airports and, in May 1998, at the Regina and Saskatoon airports.

The SLS-2000 we installed at Melbourne airport for AirServices Australia was an unqualified success. Our system has allowed Air Services

Australia to confirm the feasibility of its plans to base Australia's future air navigation and precision approach guidance system on a network of Local Area Augmentation Systems (LAAS) such as the Honeywell/Pelorus SLS-2000.

Our SLS-2000 at São José dos Campos in Brazil is steadily achieving recognition throughout South America as an economical solution to provide both precision approach and en route navigation guidance where none existed before.

Under our Teaming Agreement with Honeywell, one of our responsibilities is to train customer maintenance personnel. To date, we have produced and provided training courses in our Saskatoon facility for technicians and engineers from Minnesota, Continental Airlines, Brazil, NASA and NavCanada. During the past year, training for a group of FAA inspectors was also provided by Pelorus at Honeywell's Minneapolis facility.

#### The Changing Regulatory Environment

In the spring of 1998, the FAA formally announced its LAAS program, which included a significant advance in the implementation timetable and

acknowledged the importance of industry's contribution to the advancement and validation of LAAS technology. Of course, with our long-standing commitment to the development of LAAS, the Honeywell/Pelorus team is in an excellent position to enhance our industry leadership. The FAA program validates the commercial potential of our technology and our belief that LAAS will become the landing system of the future. Honeywell will lead our team's efforts in the U.S., responding aggressively to accelerated market opportunities.

Although the year had many significant accomplishments which all contributed to driving forward the widespread implementation of LAAS, there remains much to do to realize the potential of the US\$3 billion market for precision approach landing aids over the next ten years. The risk factors reported in our 1997 annual report continue to be valid today.

#### Strengthened Commitment from Honeywell

Honeywell Airport Systems was formed two years ago as a growth initiative within the Business and Commuter Aviation Systems division of Honeywell Space and Aviation Controls, the world's leading supplier of avionics for the commercial, military and space markets. The creation of Airport Systems is part of the division's plan to expand its business and reduce the impact of traditional market cycles in Honeywell's core business.

A catalyst in forming Honeywell Airport Systems was the aviation industry's growing need for products using global positioning. Teaming with Pelorus on the SLS-2000 is an excellent example of how Honeywell is strengthening it position in the global marketplace.

Airport Systems also allows Honeywell to apply its strong brand awareness and aviation expertise to the adjacent airport market. During the past year, Honeywell acquired two airport lighting systems companies, Hughey & Phillips in California and Daimler-Benz AG Airport Systems in Germany, to complement the SLS product and further move toward its goal of providing "an integrated landing, navigation guidance (air and surface) and lighting system solution for airfield operators".

Our alliance with Honeywell was further cemented in 1998 with the completion of a definitive agreement for installation of the SLS-2000.

#### Realities of the Marketplace

We continue to take an active role in the creation of the North American and world standards that drive our industry. While this entails a significant expense for a company of our size, it is a vital part of our business strategy and enhances our leadership position.

Our SLS product represents only half of the system, the technology on the ground. The technology in the air, the avionics, has now become industry's focus.

Even with the accelerated timetable for the introduction of LAAS in the U.S., we anticipate that the introduction of affordable avionics solutions which can be integrated readily with other avionics systems is about 12 to 18 months away. We and Honeywell expect that LAAS avionics will become widely available by late 1999.

#### A Prudent Holding Pattern

While revenue for 1998 was up significantly over 1997 at \$2,136,372 versus \$817,087, sales of SLS systems did not meet expectations, primarily due to the lack of competitively priced, suitable avionics. The lack of an international standard and continuing uncertainty over the ability of the U.S. Wide Area Augmentation System program to deliver its promised performance in precision approach guidance also contributed to customer reluctance to purchase the SLS-2000.

Earlier in the year, we believed that we had found a good opportunity to diversify our company with the acquisition of Atlantis Aerospace; however, the financial market conditions changed so dramatically during the course of our negotiations that we decided not to proceed.

For these reasons, we implemented a cost reduction program to bring General & Administrative expenses in line with our revenue expectations for the next 18 to 24 months. The full effect of the program will not be apparent until the second quarter of our 1999 fiscal period.

#### Strengthening the Foundation for the Future

As indicated earlier, we anticipate 1999 will bring some improvement in financial results. We will continue to validate SLS technology as installations increase and we enhance the system to meet the LAAS requirements. In 2000, we will begin to enjoy the results of this important period of building for the future.

With a general perception that the advent of widespread implementation of LAAS is just around the corner, the worldwide market for our Distance Measuring Equipment has become much more price competitive. Nevertheless, we expect this market to remain viable into the 21st century and we intend to capitalize on opportunities in it.

Thanks to the dedication of our employees and investors, we are confident that we have a strong foundation from which to go forward with our partner, Honeywell, to enhance our position as the world's leading supplier of ground-based satellite landing systems for aircraft.

Michael C.J. Beamish, P.Eng.
President and Chief Executive Officer

MILLEY

August 28, 1998 Calgary, Alberta

" **G P S** air navigation is inevitable and we appreciate the leadership of the Honeywell/Pelorus team to accelerate the widespread implementation of LAAS."

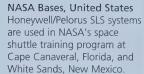
## A History of Achievement

primaria canan	
1983	Pelorus established as a distributor of airport navigation aid equipment.
1984	Develops marketing network in Canada.
1985	Opens manufacturing facility in Calgary.
1986	Supplies and installs Canada's first Microwave Landing System and fully Automated Weather Observation & Reporting System for airports.
1987	Goes public, shares listed on The Alberta Stock Exchange.
1988	Acquires assets and technology of European aerospace company, expands sales into Europe.
1989	Pioneers the adoption of Distance Measuring Equipment for helicopter operation on ice breakers and offshore drilling platforms.
1990	Expands sales into Asia and Australia.
1991	Develops state-of-the-art Distance Measuring Equipment to extend capability to include en route navigation.
1992	Develops air traffic control system simulator for Transport Canada, with nation-wide installations.
1993	Introduces prototype satellite navigation system.
1994	Expands into South America with sales of Distance Measuring Equipment to Argentina.
1995	Signs teaming agreement with Honeywell Inc. to develop, manufacture and install the Satellite Landing System. Sells world's first SLS systems for installation in Canada, Australia and the United States.
1996	Establishes factory in Saskatoon for production of the Honeywell/ Pelorus SLS to supply world markets. SLS selected by Russian Department of Transportation for development of a GPS/GLONASS landing system.
1997	SLS-2000 receives U.S. Federal Aviation Administration Type Approval. Expands into China with sale of two Distance Measuring Equipment systems. Installs SLS-2000 in Melbourne – Australia's first GPS precision approach landing aid. Delivers two SLS systems to NASA for Space Shuttle training.
1998	Launches international program to install Honeywell/Pelorus SLS systems in support of Honeywell's marketing program. Commissions SLS systems at Minneapolis-St. Paul International, Newark International, Regina and Saskatoon airports.

# PELORUS: At the Forefront of the World's High-Tech GPS Navigation Industry



AirServices Australia tested a Honeywell/Pelorus SLS-2000 at Melbourne International Airport throughout 1997. The system was placed at a sub-optimal location on the airport for test purpose only to enable AirServices to gain a better insight into potential site location problems. The SLS-2000 performance exceeded expectations. The signal coverage at en route altitudes extended well beyond the 20 nautical mile envelope required for Precision Approach guidance. This allowed AirServices to





Melbourne, Australia AirServices Australia successfully tested Honeywell/Pelorus SLS on February 7, 1997 at Melbourne International Airport.



Taipei, Taiwan
Pelorus provides
technical training
to support DME
installations at three
Taiwanese airports.



Countries or provinces with DME installations:

1 - 4 DME

5 - 10 DME

10 and up DME

1

Fairmont Hot Springs, Canada Pelorus Automated Weather Observation System provides continuous weather reporting to aircraft navigators in this mountainous region.



alidate its concept of using LAAS as both an en route and Precision Approach landing system. he testing of the system in Australia generated interest from airport owners and airlines which might esult in the early implementation of LAAS technology in Australia and the Asia Pacific region.

#### **Management Discussion**

#### and Analysis

#### Results of Operations

#### Revenue

Revenue in 1998 was \$2,136,372 compared with \$817,087 in 1997, an increase of 161%. The increase is attributable to recognition of \$1,888,386 of revenue from the sale of Honeywell/Pelorus SLS systems. Interest, other income earned, the sale of modules and monitoring of our DME systems accounted for the balance of \$247,986 in revenue.

#### Operating and Administrative Expenses

There are two components of Operating and Administrative Expense:

- Cost of goods sold
- Administration.

Cost of goods sold increased in 1998 due to the increase in revenue for the year.

Administrative expenses increased in 1998 over 1997 as we strengthened our management team and internal processes to prepare for the growth planned in the international commercialization of the SLS and to develop our installation capability and customer training programs to support Honeywell's international marketing program for the Honeywell/Pelorus SLS.

#### Selling Expense

Selling expense was \$283,473 in 1998 up from \$180,434 in 1997. The expense is for Pelorus' selling effort of SLS in Canada as well as costs associated with investigating product diversification opportunities. Under the terms of our Teaming Agreement, Honeywell is responsible for marketing the Honeywell/Pelorus SLS except in Canada.

#### **Product Development Costs**

Our policy is to write off the Deferred Research and Development costs of \$3,080,481 to develop the SLS over a five year period following certification of the Honeywell/Pelorus SLS by the FAA in August 1997. In 1998 we wrote off \$492,223 of Deferred Research and Development in addition to \$275,937 spent on product development during the year for enhancements to the SLS and regulatory support activity.

#### **Investment Tax Credits**

We did not recognize and accrue investment tax credits on the 1998 balance sheet. In 1998, the company wrote-off \$529,481 of tax credits previously accrued, due to the uncertainty involved with the ultimate utilization of these credits.

#### Liquidity and Capital Resources

As at May 31, 1998 cash and equivalents were \$1,452,496, approximately the same as our position at the same time in 1997.

Operations resulted in a cash flow deficiency of \$1,226,604. This was offset by proceeds of \$1,730,484 from the exercise of warrants and options.

Capital assets increased by \$47,054 due to equipment purchases for SLS, leasehold improvements and small miscellaneous computer equipment and computer software upgrades to support SLS production.

#### Credit Facilities and Debt Obligations

The company has access to an \$800,000 working capital credit line with Alberta Treasury Branches. This facility was not utilized in 1998.

At May 31, 1998, long term debt was \$442,245, down from \$530,033 in 1997.

#### **Share Capital**

In the first half of the year \$1,623,749 was raised by the exercise of warrants outstanding and agents options from the private placement completed in October, 1996. Share issue costs amounted to \$3,434. Exercise of employee stock options resulted in cash of \$106,735.

At May 31, 1998, there were 8,392,027 shares issued and outstanding. Employee and director options to acquire an additional 561,750 shares on or before dates to May 2002 are outstanding.

#### Year 2000

Being aware of the importance of this issue, management believes it has in place a program to mitigate the effects of the year 2000. The software and systems used by Pelorus are currently either Year 2000 compliant or have currently available patches and/or upgrades to allow them to become year 2000 compliant. Each product's compliance has been determined through public statements issued by the product manufacture; any inaccuracies in these statements shall be the responsibility of that manufacturer.

#### Risk Factors and Considerations

#### Market Size

While Type Acceptance certification by the Federal Aviation Administration of the Honeywell/Pelorus SLS-2000 is an important development in the implementation of Differential Global Positioning System (DGPS) ground stations for precision approach and landing, the technology is, as yet, not an international standard. To become an international standard, the technology requires endorsement by the International Civil Aviation Organization (ICAO), a body of 185 member nations.

On operational and economic grounds, the case for a worldwide satellite-based navigational network is compelling. There are, however, political and other considerations in the universal adoption of a DGPS-based navigational system. Pelorus and its teaming partner, Honeywell, are working diligently on relevant industry committees to provide test data and analysis on the use and performance of DGPS ground station technology. Adoption of DGPS by ICAO as a precision approach and landing standard is a qualifying factor in the ultimate size of the market for DGPS ground stations such as the Honeywell/Pelorus SLS.

#### **Market Timing**

Operational use of the Honeywell/Pelorus SLS requires that aircraft are equipped with appropriate DGPS avionics. Currently, the avionics that are commercially available are suitable for the latest generation of digital cockpit aircraft. Avionics that are priced and configured to meet the specific requirements of general aviation and regional commercial carrier operators are under development but not yet on the market. Wide scale adoption of DGPS and sales of the Honeywell/Pelorus SLS may be conditioned by the timing of the availability of suitable avionics for the general aviation and regional carrier aircraft operators. Honeywell and Pelorus are collaborating with avionics manufactures to encourage an accelerated introduction of DGPS airborne solutions for all aircraft types that use precision approach and landing systems.

#### **Product Development**

The Honeywell/Pelorus SLS has been Type Approved by the Federal Aviation Administration as meeting the specification for Special Category I (SCAT-I) precision approach and landing. While we believe that SCAT-I will be the basis for the universal standard, the standard may change and, therefore, necessitate an investment in further development, testing and regulatory approval of the SLS.

#### Honeywell Relationship

Global adoption of a new technology such as the SLS, requires a marketing effort well beyond the capacity of Pelorus' resources. Commercial success of the SLS is dependent on Honeywell's effectiveness and on Honeywell's continued commitment to the Honeywell/Pelorus program. Federal Aviation Administration certification of the Honeywell/Pelorus SLS-2000 in August 1997 is a testament to the solid alliance forged between the two companies in January 1995. We are intent on performing our obligations under the Honeywell/Pelorus Teaming Agreement and doing what it takes within our capacity to support the SLS program and Honeywell's international marketing effort.

#### Auditors' Report

## To the Shareholders of Pelorus Navigation Systems Inc.

We have audited the balance sheets of Pelorus Navigation Systems Inc. as at May 31, 1998 and 1997 and the statements of operations, deficit and changes in financial position for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at May 31, 1998 and 1997 and the results of its operations and the changes in its financial position for the years then ended in accordance with generally accepted accounting principles.

Chartered Accountants

BOO Runworky

Calgary, Alberta July 17, 1998

#### Balance Sheets

May 31	1998	1997
Assets		
Current Cash and term deposits Accounts receivable Inventory (Note 2) Prepaid expenses	\$1,452,496 1,734,321 535,794 34,226 3,756,837	\$1,457,001 783,463 1,063,881 27,668 3,332,013
Deferred product development costs (Note 3)	2,588,258	3,007,950
Capital assets (Note 4)	1,068,280	1,243,513
Investment tax credits recoverable (Note 7)		529,481
	\$7,413,375	\$8,112,957
Liabilities and Shareholders' Equity		
Current Accounts payable Deferred revenue Current portion of long-term debt	\$ 475,130 - 430,245 905,375	\$ 146,382 250,000 102,000 498,382
Long-term debt (Note 5)	12,000 917,375	428,033 926,415
Share capital (Note 6)	11,624,359	9,844,308
Contributed surplus (Note 6(d))	356,808	356,808
Deficit	(5,485,167) 6,496,000	(3,014,574) 7,186,542
	\$7,413,375	\$8,112,957

On behalf of the Board:

Director

Director

#### Statements of Operations

For the years ended May 31	1998	1997
Revenue  Contract sales and services Other	\$ 2,069,338 67,034 2,136,372	\$ 774,852 42,235 817,087
Operating and administrative expenses	2,768,323	1,796,712
Selling expenses	283,473	180,434
Research and development expenses	275,937	-
Interest on long-term debt	35,243 3,362,976	27,913 2,005,059
Loss before the undernoted	(1,226,604)	(1,187,972)
Amortization of capital assets	222,285	179,265
Amortization of deferred product development costs	492,223	-
Write-off of investment tax credits	529,481	
Net loss for the year	\$ (2,470,593)	\$ (1,367,237)
Loss per share  Basic  Fully diluted	\$ (0.30) \$ (0.30)	\$ (0.19) \$ (0.19)
Weighted average number of shares	8,173,368	7,171,766

# Pelorus Navigation Systems Inc. Statements of Deficit

For the years ended May 31	1998	1997
Deficit, beginning of year	\$ (3,014,574)	\$ (1,647,337)
Net loss for the year	(2,470,593)	(1,367,237)
Deficit, end of year	\$ (5,485,167)	\$ (3,014,574)

#### Statements of Changes in Financial Position

For the years ended May 31	1998	1997
Cash provided (used) by		
Operating activities		
Operations	\$(2,470,593)	\$(1,367,237)
Net loss for the year Items not involving cash	\$(2,470,393)	\$(1,507,257)
Amortization of capital assets	222,285	179,265
Amortization of deferred	222,203	1,75,200
product development	492,223	_
Write-off of investment		
tax credits	529,481	
	(1,226,604)	(1,187,972)
Changes in non-cash working capital balances		
Accounts receivable	(950,858)	765,076
Inventory	528,087	(112,216)
Prepaid expenses	(6,558)	(10,300)
Due to related parties	*	(427,500)
Accounts payable	328,748	(381,292)
Deferred revenue	(250,000)	- (4.254.204)
Eta au ata ar a saturata a	(1,577,185)	(1,354,204)
Financing activities  Repayment of long-term debt	(97.796)	(70,587)
Issue of share capital, net	(87,786) 1,780,051	4,077,369
issue of strate capital, flet	1,692,265	4,006,782
Investing activities		4,000,702
Purchase of capital assets	(47,054)	(673,778)
Increase in deferred development costs	(72,531)	(1,553,016)
Proceeds on disposal of capital assets	~	10,312
	(119,585)	(2,216,482)
Increase (decrease) in cash and equivalents	(4,505)	436,096
Cash and equivalents, beginning of year	1,457,001	1,020,905
Cash and equivalents, end of year	\$ 1,452,496	\$ 1,457,001
Represented by: Cash Term deposits	\$ 452,363 1,000,133 \$ 1,452,496	\$ 452,233 1,004,768 \$ 1,457,001

#### May 31, 1998 and 1997

#### 1. Significant Accounting Policies

The following is a summary of significant accounting policies of the Company:

#### (a) Revenue recognition

The Company recognizes revenue on manufacturing and installation contracts on the percentage of completion method. Percentage of completion is determined either as the proportion of costs incurred to expected contract costs, or is based on the percentage of labour to total expected labour costs. In applying the percentage of completion method, management evaluates each contract to determine the basis that best reflects the stage of completion for the particular contract. Included in accounts receivable are unbilled amounts of \$954,650 (1997 - \$169,000). These corresponding units built, pursuant to existing purchase orders, are 100% complete at May 31, 1998 but have not yet been delivered.

At May 31, 1997, the revenue on certain manufacturing contracts in progress had not been recognized as the sales were conditional upon pending certification of the product. During the year, the certification was granted and the corresponding revenue has been recognized as at May 31, 1998.

#### (b) Inventory

Inventory is recorded at the lower of cost and replacement value, which is not in excess of net realizable value. Cost is generally determined on a first-in, first-out basis.

Work in progress is recorded at the lower of cost and fair market value.

#### (c) Capital assets

Capital assets are recorded at cost, net of related investment tax credits.

Amortization is provided on assets in use during the year on the following basis:

Machinery and equipment Furniture and fixtures

- 15% declining balance basis

Automotive

- 20% declining balance basis

Leasehold improvements

- 30% declining balance basis

- 17% straight line basis

#### (d) Foreign currency translation

Foreign currency accounts are translated to Canadian dollars as follows:

At the transaction date, each asset, liability, revenue or expense is translated into Canadian dollars by the use of the exchange rate in effect at that date. At the year end date, monetary assets and liabilities are translated into Canadian dollars by using the exchange rate in effect at that date and the resulting foreign exchange gains and losses are included in income in the current period.

#### May 31, 1998 and 1997

#### 1. Significant Accounting Policies - Continued

#### (e) Deferred product development costs

Product design and development costs in relation to the development of new products are deferred and capitalized net of investment tax credits claimed, if such credits are reasonably expected to be utilized. These costs include design costs, direct materials, wages and other overhead attributable to the development of new products. Amortization of these costs commenced August 1, 1997 upon commercial production and the certification of the new products. Costs are currently being amortized using the straight line method over a period of 5 years (Note 3).

If the project is cancelled and judged to be non-commercially viable, all deferred development costs will be expensed in the year of cancellation.

Research costs of a general nature are expensed during the year, net of related investment tax credits claimed, if such credits are reasonably expected to be utilized. See Note 1(f).

#### (f) Investment tax credits

Investment tax credits are recorded in the year they are earned provided there is reasonable assurance that the credits will be realized.

#### (g) Financial instruments

The Company carries a number of financial instruments. Unless otherwise indicated, it is management's opinion that the Company is not exposed to significant interest rate, foreign currency rate, or credit risks arising from these financial instruments. The fair values of these financial instruments approximates their carrying values, unless otherwise noted.

#### (h) Accounting estimates

The Company defers certain costs incurred on manufacturing contracts underway as work in progress inventory. These amounts are based on standard cost estimates for their material and labour components. Management has deferred these costs based on their best estimate given information currently available. Substantially all of the work in progress inventory on hand at May 31, 1998 and 1997 relates to the contracts for sale of Satellite Landing Systems. As there is limited manufacturing history with regards to these new systems, the nature and amount of these estimates are subject to measurement uncertainty and actual results could differ from these estimates.

During the year, the Company accrued \$160,000 for the retrofit of the Satellite Landing Systems with an enhanced spurious emission system. This cost has been derived using the Company's internal engineers' best estimate of the labor and material costs required to rework the necessary parts. As there is limited manufacturing history with regard to this upgrade, the amount of this estimate is subject to measurement uncertainty and actual results could differ from this estimate.

#### May 31, 1998 and 1997

#### 1. Significant Accounting Policies - Continued

#### (i) The Year 2000 Issue

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effects of the Year 2000 Issue may be experienced before, on, or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant system failure which could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting the entity, including those related to the efforts of customers, suppliers, or other third parties, will be fully resolved.

#### 2. Inventory

	1998	1997
Raw materials	\$ 326,972	\$ 267,410
Work in progress	208,822	796,471
	\$ 535,794	\$ 1,063,881

#### 3. Deferred Product Development Costs

The Company has deferred product design and development costs including direct labour, materials and other general and administrative overhead attributable to the development of the new generation Satellite Landing System, until August 1, 1997. Initially, the Company had adopted a policy to amortize these deferred costs on a unit of production basis over a period not to exceed five years. Commencing December 1, 1997, the Company changed it's remaining estimate of useful life of these costs to 5 years. As a result, the net book value of these costs are being amortized using the straight line method over a period of 5 years (Note 1(e)).

#### The costs deferred include:

1998	1997
\$ 1,282,280	\$ 1,282,280
749,111	696,765
713,116	692,930
300,821	300,822
35,153	35,153
3,080,481	3,007,950
(492,223)	-
\$ 2,588,258	\$ 3,007,950
	\$ 1,282,280 749,111 713,116 300,821 35,153 3,080,481 (492,223)

May 3	31.	11	99	8	an	d	1	9	9	7
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4. Capital As	ssets					
			1998			1997
			Accumulated			cumulated
		Cost	Amortization	Cost	An	nortization
Machinery	and equipment	\$ 1,302,341	\$ 646,876	\$ 1,264,657	\$	536,319
Furniture a		692,924	359,766	689,677		277,537
Automotive		36,931	26,864	36,931		22,550
Leasehold i	improvements	168,673	99,083	162,551		73,897
		2,200,869	1,132,589	2,153,816		910,303
Cost less accum	nulated amortization	\$ 1,06	58,280	\$ 1,2	243,5	513
Long-tern	n Debt			1998		1997
				1998		1997
monthly in addition, the	nt of Alberta unse stalments of \$3,500, ne Company will pay 2	beginning July 3 2.5% of gross re	31, 1996. In evenue for a	\$ -	\$	21,064
monthly in addition, th year after t	stalments of \$3,500, ne Company will pay a the principal is repaid,	beginning July 3 2.5% of gross re to a maximum	31, 1996. In evenue for a of \$45,000.	\$ -	\$	21,064
monthly in addition, the year after the Government ing at 10% monthly in 1997 with	stalments of \$3,500, ne Company will pay a the principal is repaid, nt of Alberta unsecure of per annum since Mastalments of \$3,500 interest at 10% per a	beginning July 3 2.5% of gross reto a maximum of ed note, interest arch 31, 1995, beginning De	31, 1996. In evenue for a of \$45,000.  compound-repayable in ecember 31,	\$ -	\$	21,064
monthly in addition, the year after the Government ing at 10% monthly in 1997 with	stalments of \$3,500, ne Company will pay a the principal is repaid, nt of Alberta unsecure 6 per annum since M nstalments of \$3,500	beginning July 3 2.5% of gross reto a maximum of ed note, interest arch 31, 1995, beginning De	31, 1996. In evenue for a of \$45,000.  compound-repayable in ecember 31,		\$	·
monthly in addition, the year after to Governmer ing at 10% monthly in 1997 with not to excellent.	stalments of \$3,500, ne Company will pay a the principal is repaid, nt of Alberta unsecure per annum since Mastalments of \$3,500 interest at 10% per a peed \$75,000.	beginning July 3 2.5% of gross re to a maximum of ed note, interest arch 31, 1995, beginning De annum with total	31, 1996. In evenue for a of \$45,000.  compound-repayable in ecember 31, all repayment	\$ -	\$	·
monthly in addition, the year after the Government ing at 10% monthly in 1997 with not to excell Western Di \$5,000 mo of gross retails.	stalments of \$3,500, ne Company will pay a the principal is repaid, not of Alberta unsecure per annum since Mastalments of \$3,500 interest at 10% per a teed \$75,000.  Interest at 10% per a teed \$75,000 interest at 10% per a te	beginning July 3 2.5% of gross reto a maximum of ed note, interest arch 31, 1995, beginning Deannum with total d program loan, quarterly instalr 1,000,000 to Ma April 1, 1996 a	a31, 1996. In evenue for a of \$45,000.  compound-repayable in ecember 31, all repayment  repayable in ments of 6% ay 31, 1998. t 8.25%. All		\$	·
monthly in addition, the year after to government ing at 10% monthly in 1997 with not to excell Western Di \$5,000 mo of gross retaining	stalments of \$3,500, ne Company will pay a the principal is repaid, not of Alberta unsecure of per annum since Mastalments of \$3,500 interest at 10% per a ped \$75,000.  Interest at 10% per a ped \$75,000 interest at 10% per a ped \$75,000 interest and interest on the principal and interest an	beginning July 3 2.5% of gross reto a maximum of ed note, interest arch 31, 1995, beginning Deannum with total d program loan, quarterly instalr 1,000,000 to Ma April 1, 1996 at outstanding w	a31, 1996. In evenue for a of \$45,000.  compound-repayable in ecember 31, all repayment  repayable in ments of 6% ay 31, 1998. t 8.25%. All as due June	54,000	\$	73,832
monthly in addition, the year after to government ing at 10% monthly in 1997 with not to excell Western Di \$5,000 mo of gross retaining 30, 1998.	stalments of \$3,500, ne Company will pay a the principal is repaid, not of Alberta unsecure of per annum since Mastalments of \$3,500 interest at 10% per a ped \$75,000.  Interest at 10% per a ped \$75,000 interest at 10% per a ped \$75,000 interest and interest on the company is company is company is company is company with the Company is company with the company is company with the company is company with the company is company in the company in the company is company in the company in the company in the company is company in the com	beginning July 3 2.5% of gross reto a maximum of ed note, interest arch 31, 1995, beginning Deannum with total d program loan, quarterly instalr 1,000,000 to Ma April 1, 1996 a outstanding wurrently in the	a31, 1996. In evenue for a of \$45,000.  compound-repayable in ecember 31, all repayment  repayable in ments of 6% ay 31, 1998. t 8.25%. All as due June	54,000	\$	73,832
monthly in addition, the year after the Government ing at 10% monthly in 1997 with not to excell Western Di \$5,000 moof gross retaining 30, 1998.	stalments of \$3,500, ne Company will pay a the principal is repaid, and of Alberta unsecure for per annum since M instalments of \$3,500 interest at 10% per a feed \$75,000.  Inversification unsecured on the company is company is company is company is company of the company of	beginning July 3 2.5% of gross reto a maximum of ed note, interest arch 31, 1995, beginning Deannum with total d program loan, quarterly instalr 1,000,000 to Ma April 1, 1996 a outstanding wurrently in the	a31, 1996. In evenue for a of \$45,000.  compound-repayable in ecember 31, all repayment  repayable in ments of 6% ay 31, 1998. t 8.25%. All as due June	54,000	\$	73,832

1999	\$ 430,245
2000	12,000
	\$ 442.245

#### May 31, 1998 and 1997

#### 6. Share Capital

#### (a) Authorized

Unlimited number of:

Common shares
First preferred shares, issuable in series
Second preferred shares, issuable in series

The First preferred series A shares had the following rights, privileges, restrictions and conditions:

- holders were entitled to receive, as and when declared by the Board of Directors, cumulative cash dividends at the rate of 9 1/2% per annum, payable quarterly.
- the First preferred shares, Series A, were redeemable at a price of \$1.46 per share plus accrued and unpaid dividends.
- holders were entitled to one vote in respect to each First preferred share, Series A held.

#### (b) Issued

,		1998		1997
	Number of		Number of	
	Shares	Amount	Shares	Amount
Common shares				
Balance, beginning				
of year	7,678,680	\$ 9,844,308	6,640,013	\$ 5,766,939
Issued for cash on				
exercise of options	96,250	230,485	428,667	699,266
Issued for cash via private				
placement				
(Note 6(e)(ii))	-	-	600,000	3,600,000
Issued for cash upon				
exercise of warrants				
(Note 6(e)(i))	600,000	1,500,000	-	-
Issued in exchange				
for services	17,097	53,000	10,000	70,000
Share issue costs		(3,434)		(291,897)
	8,392,027	\$ 11,624,359	7,678,680	\$ 9,844,308

#### (c) Employee stock options

The Company has established a stock option plan for the benefit of the directors, officers and employees of the Company. Options may be granted to purchase up to 10% of the common shares of the Company at any time at a price of not less than 90% of the current market price as listed on a stock exchange or, if the common shares are not then listed on a stock exchange, the exercise price will be as determined by the Board of Directors of the Company. The Company has granted stock options to certain directors, officers and employees for a total of 561,750 common shares (1997 - 522,300). Pursuant to this stock option plan, 220,000 options were issued in 1998 (1997 - 481,000). In addition 133,800 options were cancelled in 1998 (1997 - 1,000). Details of the options outstanding at the date specified are as follows:

#### May 31, 1998 and 1997

#### 6. Share Capital - Continued

#### As at May 31, 1998

750 at an exercise price of \$1.42 per share, expiring February, 2001 16,000 at an exercise price of \$6.50 per share, expiring August, 2001 86,000 at an exercise price of \$6.50 per share, expiring October, 2001 202,000 at an exercise price of \$6.95 per share, expiring November, 2001 2,000 at an exercise price of \$6.25 per share, expiring February, 2002 35,000 at an exercise price of \$5.85 per share, expiring May, 2002 25,000 at an exercise price of \$6.10 per share, expiring July, 2002 145,000 at an exercise price of \$5.30 per share, expiring October, 2002 50,000 at an exercise price of \$4.10 per share, expiring November, 2002

#### As at May 31, 1997

25,000 at an exercise price of \$.85 per share, expiring September, 2000 2,500 at an exercise price of \$1.42 per share, expiring February, 2001 20,000 at an exercise price of \$4.15 per share, expiring May, 2001 42,000 at an exercise price of \$6.50 per share, expiring August, 2001 88,800 at an exercise price of \$6.50 per share, expiring October, 2001 292,000 at an exercise price of \$6.95 per share, expiring November, 2001 17,000 at an exercise price of \$6.25 per share, expiring February, 2002 35,000 at an exercise price of \$5.85 per share, expiring May, 2002

#### (d) Contributed surplus

During 1996, the Company repurchased and cancelled 547,945 Series A preferred shares and related cumulative dividends unpaid of \$411,920 (\$380,000 cumulative and unpaid balance to May 31, 1996) for a purchase cost of \$400,000. The cancelled shares were recorded in the financial statements at \$756,808, resulting in contributed surplus of \$356,808.

#### (e) Warrants and options

(i) During 1996, the Company issued, on a private placement basis, 1,200,000 units at a price of \$2.00 per unit. Each unit consisted of one common share and one half of one warrant. Each warrant entitled the holder to acquire one share at \$2.50 on or before October 23, 1997. 600,000 Warrants were issued and remained outstanding at May 31, 1997. All of these warrants were exercised in 1998.

In 1997, stock options were issued to agents who assisted with the raising of capital for the Company as follows:

- 75,000 stock options were issued at an exercise price of \$2.50 per share, of which
   25,500 were exercised in 1997. All of the remaining options were exercised in 1998.
- (ii) During 1997, the Company issued, on a private placement basis, 600,000 units at a price of \$6.00 per unit. Each unit consisted of one common share and one half of one warrant. Each warrant entitles the holder to acquire one share at \$6.90 per share on or before October 25, 1997. 300,000 warrants were issued in 1997 and remain outstanding at May 31, 1998. During 1998, the Company made an application to extend the expiry date of these warrants to October 23, 1998.

#### May 31, 1998 and 1997

#### 6. Share Capital - Continued

Additional stock options and warrants were issued to the agent who assisted with the raising of capital for the Company as follows:

- 60,000 stock options were issued at an exercise price of \$6.00 per share. These options remained outstanding as at May 31, 1997 and expired on April 25, 1998. None of these options were exercised in 1998.
- 30,000 stock warrants to be issued entitling the holder to acquire one share at \$6.90 on or before April 25, 1998. The agent must exercise all of the above noted options prior to any exercise of these warrants. None of these warrants were exercised in 1998 and have all expired.

#### 7. Income Taxes

The Company has research and development costs of \$6,282,900 (1997 - \$6,056,300) available to reduce future taxable income and investment tax credits of \$1,619,400 (1997 - \$1,553,000) available to reduce future taxes payable, subject to confirmation by taxation authorities. The research and development cost pool will be reduced by the amount of any investment tax credits utilized. The Company had recognized and accrued \$529,481 of investment tax credits to May 31, 1997. In 1998, the Company wrote off these credits due to the uncertainty involved with their ultimate utilization.

The future tax benefits of the net research and development cost pools being carried forward have not been recognized in these financial statements.

Income taxes reported differ from the amount computed by applying the statutory federal and provincial income tax rates to income before income taxes. The reasons for these differences and their tax effects are as follows:

Provision for income taxes based on statutory rate of 44.34% Unrecognized benefit (utilization) of tax loss carry forwards Write off of investment tax credits
Other

1998	1997
\$ (1,095,461)	\$ (606,232)
1,344,449	627,518
(232,760)	-
(16,228)	(21,286)
\$ -	\$ -

The Company has incurred non-capital losses for income tax purposes of approximately \$2,605,000 (1997 - \$1,558,000) which are available to reduce taxable income in future years. If not utilized, these losses will expire approximately as follows:

May 31, 2001	\$ 21,000
May 31, 2004	1,536,000
May 31, 2005	1,048,000
	\$ 2,605,000

#### May 31, 1998 and 1997

#### 8. Commitment and Contingencies

(a) The Company is committed under the following leases for the rental of office and manufacturing space, with the aggregate yearly rental under the unexpired terms of these leases as follows:

	Calgary	Saskatoon
	Property	Property
1998	\$75,000	\$32,307
1999	75,000	32,307
2000	79,167	32,307
2001	85,000	2,692
2002	49,583	-

(b) A legal claim has been filed against the Company which is currently outstanding. It is the opinion of the Company that this claim is without merit. A reasonable estimate for any potential loss cannot be made. As a result, no provision has been made for this claim in the financial statements. However, should any loss result from the resolution of this claim, such loss would be accounted for in the period in which it occurs.

#### 9. Economic Dependence

The Company has entered into an exclusive, long term teaming agreement with Honeywell Inc., a major supplier of avionics equipment, to develop, manufacture, install, maintain and market the Company's next generation satellite landing system. The majority of the Company's future sales will be generated pursuant to the terms of this agreement.

#### 10. Financial Instruments

As disclosed in Note 1(g), the Company holds various forms of financial instruments. The nature of these instruments and the Company's operations expose the Company to foreign currency risk, interest rate risk, fair value, and industry credit risks. The Company manages its exposure to these risks by operating in a manner that minimizes its exposure to the extent practical.

#### (a) Interest rate risk management

The fixed interest rate debt is subject to interest rate price risk, as the fair value of debt will fluctuate as a result of changes in market rates. As at May 31, 1998, the Company had fixed interest rates on approximately \$388,000 (1997 - \$456,000) of its long-term debt obligations. The remaining \$54,000 (1997 - \$74,000) of long-term debt is non-interest bearing.

In addition, the Company also has the obligation to pay a specified percentage of future gross revenues as detailed in Note 5.

#### (b) Foreign currency rate risk management

A significant portion of the Company's accounts receivable and accounts payable is denominated in U.S. dollars. Accordingly, the net amounts outstanding are subject to fluctuations in exchange rates. The Company does not have any exposure to highly inflationary foreign currencies.

#### (c) Credit risk

A significant portion of the Company's trade accounts receivable are from companies in the avionics equipment industry and, as such, the Company is exposed to all the risks associated with that industry.

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Name	☐ Update my information.
	☐ Delete me from your mailing list
Title	Check as many as apply:
Company	<i>I am</i> a(n)
Andrass	☐ Current Shareholder
	☐ Registered Shareholder
	☐ Individual Investor
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Province/StateCode/Zip	☐ Researcher
Phone	☐ Investment Advisor
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E-Mail	Other
Please contact me by 🛘 mail 🗖 phone 🗖 fax 🗖 e-mail	
Please fill out this card and return it to us by fax (403-730-5511) or mail (address on reverse).	verse).

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# PELORUS NAVIGATION SYSTEMS INC.

5418 - 11 Street N.E.

Calgary, Alberta, Canada T2E 7E9



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#### STOCK EXCHANGE

The Alberta Stock Exchange Symbol "PN"

#### HEAD OFFICE

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**Pelorus:** a navigational instrument resembling a mariner's compass without magnetic needles and having two sight vanes by which bearings are taken.





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REPORT

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